

# Maneuver Warfare for the Mind

Educating for thinking and judgment

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***“My intent in PME is to teach military judgment rather than knowledge. Knowledge is of course important for developing judgment, but should be taught in the context of teaching military judgment, not as material to be memorized.”<sup>1</sup>***

**—Gen Al Gray**

***“We talk about Marines being able to take intelligent initiative based on a changing situation; that’s the essence of maneuver warfare, and that requires our Marines to be much, much smarter than we have been in the past.”<sup>2</sup>***

**—MajGen William F. Mullen**

In a recent article, we noted that *MCDP 7, Learning* is a useful starting point for explaining *why* learning is so important to the profession of arms and is a necessary first step to combatting some remnants of anti-intellectualism in the Corps’ ranks.<sup>3</sup> That was its key purpose, and it successfully began what we hope will be a lasting conversation and broader movement that embraces learning and thinking in the Marine Corps and perhaps even inspires other organizations to start similar initiatives.

*MCPD 7*, however, did not set out to address some fundamental aspects relating to the *how* that are necessary for improving our learning and thinking capabilities, progressing beyond an

industrial era mindset, and preparing ourselves for great power competition. Complementing the *why*, we must also address how to develop judgment. Knowledge and skills are not the only goals of learning, as *MCDP 7* suggests,<sup>4</sup> but their application is as well. Another possible extension to *MCDP 7* relates to the ideas of a “learning organization” and “organizational learning.” While the terms are mentioned a total of six times, the publication never explains how individual learning contributes to organizational learning and vice versa. *MCDP 7* also takes a mostly narrow, incentives-based approach to its discussion of intrinsic motivation and as a result overlooks how to inspire an enthusiasm in our Marines that looks beyond incentives to fulfilling our professional calling and living up to our identity as Marines.

We hope to help start filling in some of these gaps by sharing a few of Col Mike Wyly and Col G.I. Wilson’s expe-

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riences and the learning methodologies they used during the original maneuver warfare movement to develop judgment in our Marines. First, we focus on formal professional military education and Col Wyly's time teaching maneuver warfare and decision making as Head of Tactics Instruction at Amphibious Warfare School (AWS). Then, we discuss the operating forces and Gen Al Gray's establishing the Maneuver Warfare Board at 2d MarDiv when he was commanding general. These formal organizational mechanisms inspired and created synergies with informal study groups consisting of passionate Marines (and non-Marines) who studied on their own and gathered to debate, refine, and contribute ideas to the conceptual development of maneuver warfare. They were motivated out of a sense of duty to their profession, their organization, and their fellow Marines. These organizational mechanisms and learning methodologies combined to form a learning organization.

### **Educating for Thinking and Judgment: Examples and Practices**

*Teaching maneuver warfare at AWS.* Col Wyly believes the human mind is like a muscle: the more you use it, the better it gets. In teaching tactics, however, this does not mean encouraging the rote memorization of prescribed solutions. Rather, Marines need to exercise the thought process of look-



**Sand-table exercises and tactical-decision games are simple, effective teaching/learning methods.** (Photo by PFC Nicole Rogge.)

ing for opportunities and weaknesses to exploit and avoiding entrapments. Unfortunately, after LtGen Bernard “Mick” Trainor ordered Wyly to assume the position of Head of Tactics Instruction at AWS before the 1979–80 school year, Wyly quickly realized the “approved” lesson plans had changed little since he attended TBS in 1963 and AWS in 1972—sixteen years and one war later. They took an industrial age approach to learning and teaching, focused on set piece engagements, and, to make matters worse, were boring.

There are many problems with this methodical, industrial age approach. The enemy does not get a vote.<sup>6</sup> It advances the notion of perfect assumptions and perfect answers, which may make sense in a static and stable world, but not one in which any of us live, and it subscribes to the theory that teaching is a matter of imparting knowledge and not developing the judgment needed to face ill-structured problems to which rules and formulas do not apply. At AWS in particular, following exercises, instructors handed out schoolhouse solutions known as “The Yellows.” They were the “right” answer, as thought of and approved by the faculty and director in their “infinite wisdom.” They were always printed on yellow paper—thus, the name. Wyly observed that the Yellows shut down thinking and intellectual inquiry and aroused unproductive dissent. Born from an instinctive predilection to challenge authority, discussions between the captains and instructors quickly degenerated into an “us” versus “them” game of “I know better than you.” Handing out prescribed solutions also implicitly suggested that thought was not actually required in tactics. Rather, tactics was simply a matter of following a step-by-step methodology.

Upon taking over, Wyly also observed the curriculum for the tactics

***“Maneuver warfare cannot be taught through methodical teaching ... Before 1989, Marines learned from an instructor who stood on a stage with a pointer and lectured ... He began by giving them definitions to learn ... Field exercises eventually followed the lectures. Yet they, too, were set pieces ... leaders did not learn to make decisions so much as they were taught a decision-making process, a methodology outlined step by step in a book that no commander is ever known to have actually followed in a real war.”<sup>5</sup>***

***—Col Wyly***

course focused overwhelmingly on planning. In contrast, Wyly preferred *action*. Students could not be expected to plan without first having been educated in what to plan *for*. Wyly wanted to change this, and Trainor gave him the latitude and direction to draw on his experiences as a rifle company commander in Vietnam and as a recent military and Russian history graduate student at George Washington University to revitalize the curriculum and make it more relevant to preparing Marines for combat. His experiences remain relevant today, both for understanding some of the historical details and intellectual and institutional foundations involved in reinvigorating maneuver warfare, as well as for others interested in developing judgment.

Wyly believed discussions between students and their instructor underpinned any scholarly course, especially one focused on combat tactics. He had discovered during his graduate studies that class discussions flowed more fluidly when students had read the same materials, so he began to turn certain lectures into book studies. “What did you get out of David Chandler’s *The Campaigns of Napoleon*? Robert Heinl’s *Victory at High Tide*?” He never told students what they should take away in advance because he wanted to encourage and invigorate *thinking* among his officers so they and the instructor could learn from one another. These discussions inspired even more reading and discussions outside the classroom. A small study group formed organically and started meeting every Friday night to discuss warfare and write articles to publish in the *Gazette*.

Wyly also believed his students needed to practice decision making with incomplete information and under conditions of uncertainty in order to improve their ability to do so, much like running improved their physical fitness. Before class, Wyly found a chalkboard and drew a layout of the terrain that would become the area of operations into which his students would project themselves as they practiced “combat decision making.” At the beginning of class, Wyly provided the students all they would know if they were really there: the time, weather, terrain, type

and number of forces under their command, what (little) they knew about their enemy, their mission, the focus of effort, and the commander’s intent one and two echelons up. After clarifying whether there was anything his students did not understand, he picked a student, introduced a new development into the scenario, and forced the student to exercise his mind and make a decision. Students initially tried to feel Wyly out by asking questions to see if they were on the right track, but Wyly wanted them to act: “What are you going to *do*, captain?!” Wyly saw firsthand that this decision-forcing approach worked. Students learned to think, exercise judgment, and decide and act in situations with only limited rationality and information instead of waiting for more. Such active learning approaches are crucial to our ability to move beyond our industrial age training and education model to one of thinking and judgment.

Wyly’s emphasis on decision making was integrated with his understanding of Col John Boyd’s OODA (observe-orient-decide-act) Loop, which Wyly learned in almost daily conversations with Boyd himself. Wyly preferred not to overemphasize the concept, believing his students should instead focus on identifying enemy vulnerabilities and how best to exploit them. However, there was always the reminder that if you did not act quickly and decisively enough, the enemy might already be applying a new and different initiative against you. Thus, the OODA Loop is not a decision-making checklist but rather a constant reminder that in a changing situation, good ideas only work if they are applied quickly and decisively.

### 2d MarDiv Maneuver Warfare Board

One unfortunate aspect of organizational behavior is that large organizations rarely change. Even the best ideas rarely overcome the inertias that permeate organizations, especially at the headquarters level, and rules and regulations stifle innovative and creative thinking that could lead to change. Gen Gray understood these limitations and thus embarked on a bottom-up approach to

change in order to generate enthusiasm for maneuver thinking and the ideas undergirding it and build maneuver thinking into the organization and its members.

One of Gray’s key initiatives as the CG, 2d MarDiv was the 2d MarDiv Maneuver Warfare Board, which served as a clearinghouse for generating and refining maneuver ideas in rigorous debates, as a mechanism for teaching maneuver warfare to the division, and as an avenue for experimenting and testing these ideas in the field. While this initiative itself did not last past Gen Gray’s tenure as CG, it helped produce lasting intellectual and organizational changes that introduced maneuver warfare thinking to young Marines and made evangelists of them.<sup>7</sup> One core member of the board was Capt G.I. Wilson, who had been inspired by the words and ideas of then BGen Gray, Capt Steve Miller, Maj William Fite, Col Boyd, then LtCol Mike Wyly, and William Lind on combined arms, maneuver, mobility, and deception.<sup>8</sup> Their ideas resonated with Wilson, who had previous experience in outnumbered situations while serving as a police officer after leaving active duty.<sup>9</sup>

Wilson was stationed at Camp Lejeune in 1981 when his old OCS and TBS battle buddy, Bill Woods, received orders from AWS to 2d MarDiv. Woods was a student of Wyly’s and was an active participant in the Friday night study group. He left AWS with advice from Wyly and the enthusiasm to start a maneuver warfare study group beyond AWS. The group Woods and Wilson helped form was a bottom-up, grassroots initiative driven by the energy and passion for ideas of relatively junior Marines. The group held a handful of meetings before Gen Gray checked in as the new CG. Gen Gray had already adopted maneuver thinking, had similarly formed after hours study groups at his previous commands, and had already begun implementing and testing maneuver principles, first in Vietnam and then while CG, 4th MAB in the mid-to late-1970s. Woods and Wilson met Gray at the Officers’ Club, where they discussed maneuver ideas. Gray directed them to arrange a dinner meeting to in-

roduce him to their study group, which also included Captains Denny Long and Bob Semler and Majors Jim Marapoti and Dick Dietmeier. In October 1981, Gray issued an order establishing the 2d MarDiv Maneuver Warfare Board, and this group formed its nucleus.<sup>10</sup> The board served as an important mechanism for organizational exploration, as well as for facilitating small group active learning and critical thinking skills.

In keeping with his approach to leadership and organizational change, Gray empowered and entrusted junior officers, whose actions and numbers dominated the board. For example, whenever there was an informal gathering of maneuver study group personnel or a formal gathering of the board, Gray always made a point of asking junior officers and enlisted for their input first, thus allowing for respectful dissent and maverick thinking to emerge. Gray well understood the importance of trusted relationships between junior and senior personnel, as did Boyd. Junior Marines had the ethical, professional, and moral duty to question anything a commander said if they did not understand what the commander wanted to happen or the outcome he desired. However, this could only happen if trust relationships had been developed and fostered. Gray thus set in place the foundation for the

learning environment and trust relationships critical to judgment and decisive action.

Gray also “deployed” Woods, Wilson, and others to 2d MarDiv units and staff sections to begin educating young Marines in small groups on the tenets of maneuver warfare, thus planting and growing maneuver thinking throughout the division and establishing a larger base of grassroots support. The board members were still trying to learn maneuver warfare themselves, but Gray believed there was no better way to learn than to teach. As one might expect, organizational discomfort with change manifested itself in disagreement and debate, especially from higher-ranking officers. To prepare for this pushback, the board and small study groups first challenged each other’s ideas internally before introducing them to a larger audience. The board and small study groups were akin to conceptual laboratories, where ideas were introduced and then rigorously evaluated.

While teaching across the division, the board cultivated an enthusiasm for reading, studying, and learning about the profession of arms. Gray always reminded his Marines it did not cost money to think. Marines were viewed as graduate students in warfare, and junior Marines, who were the most enthusias-

tic, oftentimes ended up knowing more than their seniors. This enthusiasm contributed to the emergence of the intellectual awakening of the Marine Corps. Encouraged by LtGen Trainor’s reading list at Quantico’s Education Center and Gen Gray’s list, which ultimately became the *Commandant’s Professional Reading List*, reading became “popular” and was viewed as a professional duty and an expectation for everyone in the division, and the board prepared reading packets of short articles to help facilitate the understanding and assimilation of maneuver thinking.<sup>11</sup>

Like Wyly, Gray always impressed upon his Marines that action is part of learning. The ideas introduced and then refined conceptually ultimately had to be tested in the field, which the board did in a form of prototype experimentation that integrated some core elements of adult learning with an operational and organizational skunk works. This effort to educate and prototype (i.e., test, experiment) seeded the vision for what would become the Marine Corps Warfighting Laboratory. Given the budgetary constraints at the time, the Marines of 2d MarDiv had to get creative. For example, sometimes exercise forces went to the field with quarter or half-full tanks of fuel, forcing them to be creative in how they adapted to limited logistical support and partial and imperfect information.<sup>12</sup>

These experiments culminated in “free play” exercises at Fort Pickett, which tested these ideas at a division-wide level. A key aspect in preparing for these exercises was the education of the umpires and observers. Capt Woods worked hard to ensure they knew and understood relevant maneuver definitions, concepts, and tenets and what they looked like in the field. During these exercises, junior Marines and officers experienced the benefits of maneuver warfare firsthand, turning them into evangelists. Candid after-action reviews (AARs) followed each evolution. During one particularly memorable AAR, Gen Gray removed his rank insignia and then asked his junior enlisted Marines for a frank assessment of what did and did not happen during the evolution, why things transpired the way they did,



**Thorough after-action reviews are the critical and sometimes neglected element of the “free-play” force-on-force training.** (Photo by LCpl Anabel Abreu Rodriguez.)

and what decisions were made (or not) to support the desired end state. Gray was always more concerned with *why* his Marines did what they did rather than *what* they did, and valuing ideas over rank or titles was a cornerstone of the maneuver philosophy.

### Learning (and Wanting) to Learn

Wilson and Wyly's experiences illustrate some of the mechanisms that constitute a learning organization. Junior enlisted and junior officers externalized their experiences and insights from exercises and self-study in AARs and study groups, where passionate Marines evaluated and recombined this experiential knowledge into more refined maneuver theories that fed into articles in the *Gazette* and AWS and 2d MarDiv training and educational initiatives. These ideas were subsequently evaluated by increasingly larger audiences and ultimately tested in the field, resulting in more experiential knowledge to continue the process.

Wilson and Wyly's experiences also highlight how instrumental debate and providing outlets for it were to the development of maneuver theory. However, implicit in productive debate is the notion that ideas matter more than the rank or title of the person who holds them. Humility is thus fundamental to continuing to want to learn, and junior Marines need to be encouraged to participate without fear of reprisal, especially since they, as sensors on the front lines for the organization, are likely to be the first ones to identify changes in the operational environment and the need to adapt—and might have even done so already. Honest experimentation in the field, especially in force-on-force or “free play” exercises, as opposed to scripted scenarios and “proofs of concept” for technology, also requires ensuring junior Marines feel they have permission to make mistakes and even fail in order to generate feedback, test bounds, and promote learning.

Lastly, fundamental changes in large bureaucratic organizations require a broad base of support and investments in, and the efforts of, lots of people over long periods of time. Generating enthusiasm and inspiring Marines to

live up to their professional calling as warrior-scholars can be more powerful over the long-term than simple incentives (not that those should be discarded). *MCDP 7* gives Marines permission to take self-study and professional discussions and development seriously, and in doing so, makes an important contribution to our ability to develop into a learning organization that can adapt to meet the demands of great power competition.

### Notes

1. Commandant of the Marine Corps to Commanding General, Marine Corps Combat Development Command, “Training and Education,” 10 October 1988, Alfred M. Gray Collection, Box List Part 2, Box 6, Folder 12, Brigadier General Edwin H. Simmons Center for Marine Corps History, Quantico, VA.

2. Megan Eckstein, “Marines Issue New Doctrine Prioritizing Learning,” *USNI News*, (May 2020), available at <https://news.usni.org>.

3. Mie Augier, Sean F.X. Barrett, G.I. Wilson, and Michael Duncan Wyly, “Maneuver Warfare for the Mind: The Importance of Learning and Thinking to Maintaining Our Competitive Edge,” *U.S. Naval Institute Blog*, (July 2020), available at <https://blog.usni.org>.

4. Headquarters Marine Corps, *MCDP 7, Learning*, (Washington, DC: 2020).

5. Michael Duncan Wyly, “Teaching Maneuver Warfare,” in *Maneuver Warfare: An Anthology*, ed. Richard D. Hooker, Jr., (Novato, CA: Presidio Press, 1993). Emphasis in original.

6. Wyly reflects, “The enemy became an inanimate object that sat immobile on the objective waiting to be defeated, shown graphically as a box colored red, in contrast to the blue friendly forces whose predictable courses were drawn with straight arrows, reflecting the certainty with which commanders expected to seize their terrain objectives. Seizing objectives was what the methodical battle was about, never defeating the enemy.”

7. That the board did not last is not necessarily a bad thing and might have even helped make it successful. When institutional initiatives begin focusing on their own survival, they tend to lose sight of the ideas on which they were founded. Additionally, given the penchant of “hot groups” like the Maneuver Warfare Board for disruption, organizations prefer to kill them off, thus neces-

sitating the protection and support of a senior leader. As a result, such groups are typically short-lived and do not last, but they can have out-sized, lasting impacts on organizations. It is thus not surprising the Maneuver Warfare Board similarly did not last when Gen Gray and others rotated to new assignments. Jean Lipman-Blumen and Harold J. Leavitt, “Hot Groups ‘With Attitude’: A New Organizational State of Mind,” *Organizational Dynamics*, (Elsevier: Amsterdam, Spring 1993).

8. Boyd, a retired Air Force colonel, and William Lind, a civilian, were outsiders. This openness to outside ideas is central to an organization's ability to avoid becoming a closed system, yet it is not without difficulties. Many senior Marines found themselves challenged by Lind, who knew how to debate. Wilson admired Lind's intellectual judo and his insistence on professionals studying their history and profession, making him eager to educate himself and develop as a professional warfighter along those lines.

9. Wilson, who was commissioned in 1972, left active duty for law enforcement and remained in the Reserves. He then returned to active duty in 1979.

10. Staff, “Maneuver Warfare Board at Lejeune,” *Marine Corps Gazette*, (Quantico, VA: October 1981). Damian identifies the educational and training initiatives at AWS and Camp Lejeune as one of three mechanisms that helped transform the Marine Corps. The other two were the debates in the *Gazette* and the strategic leadership of Gen Gray, Fideleon Damian, “The Road to *FMFM 1*: The United States Marine Corps and Maneuver Warfare Doctrine, 1979–1989,” (master's thesis, Kansas State University, 2008).

11. Bill Woods cautions that reading materials like this can fall into the “methodical, industrial age” trap if they become viewed as a laundry list of things to do. “Illustrating vice teaching ‘fighting smart,’” Woods posits, “is best done by historical example.” Bill Woods email to G.I. Wilson on 12 September 2020.

13. As a result, Capt Denny Long developed some creative logistics ideas such as refueling and repairing as far forward as possible instead of evacuating equipment to rear areas and fixed facilities.

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